

## ABSTRACT

A switchable high frequency bandpass filter includes an input node and an output node, a switchable LC resonator, and a switch signal input interface circuit. The switchable LC resonator is coupled between the input node and the output node for providing a plurality of high frequency signals having different frequencies with a plurality of switchable filter transfer functions. The switch signal input interface circuit is coupled to the switchable LC resonator. A switch signal is supplied to the switchable LC resonator through the switch signal input interface circuit for controlling the switchable LC resonator to provide the plurality of high frequency signals having different frequencies with a suitable one of the plurality of switchable filter transfer functions, respectively.